STIC Search Report
EIC 2100

USPTO — Scientific & Technical Information Center

TO: Dennis Y Myint Location: RND 3D18 Art Unit: 2162 Tuesday, March 06, 2007 **Case Serial Number: 10/699062**	**From: Carol Wong** Location: EIC 2100 RND-4B28 Phone: 571-272-3513 Carol.Wong@uspto.gov

Search Notes

Dear Ex. Myint:

Attached are the search results for your case.

Color tags mark the patents/articles which appear to be most relevant to the case. Color of tag has no significance. Pls review all documents, since untagged items might also be of interest.

Pls call if you have any questions or suggestions for additional terminology, or a different approach to searching the case.

Thanks, Carol

File with 10/699,062

Sira
Search and Information
Resources Administration

File 348:EUROPEAN PATENTS 1978-2007/ 200708
        (c) 2007 European Patent Office
File 349:PCT FULLTEXT 1979-2007/UB=20070301UT=200; ----
        (c) 2007 WIPO/Thomson

Patents

Full Text

Set	Items	Description
S1	1	AGGID? ?
S2	1354671	AGGREGAT? OR GROUP???? OR BATCH??' L???? OR BUNCH???? OR CLUSTER???? OR
S3	523966	CATALOG? OR CATEGOR??? OR CLASSIF SIFICATION? OR FAMILY? OR FAMILIES O
S4	342467	ORGANIZ??? OR ORGANIZAT? OR ORGAN USTER????
S5	17359	KERNEL? ?
S6	149805	(TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE? OR BEHA- VIOR? OR BEHAVIOUR? OR BEHAV???)(5N)(DATUM OR DATA OR INFORMA- TION)
S7	232973	(OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB? OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?)(5N)(DATUM OR DATA OR INFOR- MATION)
S8	112884	(ANALYS? OR ANALYT? OR ANALYZ?)(5N)(DATUM OR DATA OR INFOR- MATION)
S9	17758	S2:S4(5N)(ABEND? ? OR FAULT? OR DEFECT? OR ANOMAL? OR DEFI- CIEN? OR ABNORMA? OR FLAW? OR IMPAIR? OR ABERRA?)
S10	18929	S2:S4(5N)(MALFUNCTION? OR INOPERA? OR DYSFUNCT? OR DISFUNC- T? OR BUG? ? OR ERROR? ? OR DEVIA? OR IRREGULAR?)
S11	21968	S2:S4(5N)(CORRUPT? OR DEGRAD? OR EVENT? ? OR BIST OR SELFT- EST? OR SELFDIAGNOS? OR DEBUG? OR BUGGY OR BUG OR BUGS)
S12	19419	S2:S4(5N)S6:S8
S13	843	S2:S4(5N)S5
S14	59674	S2:S4(3N)(ID OR IDS OR IDENTIFIER? ? OR TAG? ? OR LABEL???? OR INDICANT? ? OR INDICAT?R? ? OR DESIGNAT?)
S15	64861	(S2:S4 OR CLASS??)(3N)(ID OR IDS OR IDENTIFIER? ? OR TAG? ? OR LABEL???? OR INDICANT? ? OR INDICAT?R? ? OR DESIGNAT?)
S16	18764	(S2:S4 OR CLASS??)(3N)(METATAG? OR METAVALUE? OR INDICIA? ? OR NAME? ?)
S17	456850	KEY? ? OR CODE OR CODES
S18	61072	HASH? OR MESSAGE()DIGEST? OR MESSAGEDIGEST? OR DIGEST? ?
S19	1828	S14:S16(25N)S9:S13
S20	4118	S14:S16(10N)S17
S21	171	S19(25N)S20
S22	1	S21(25N)S18
S23	1	S22 NOT S1
S24	7	S19(25N)S18
S25	6	S24 NOT (S1 OR S23)
S26	7	S21(25N)(S5 OR OS OR OPERATING()SYSTEM? ?)
S27	5	S26 NOT (S1 OR S23 OR S25)
S28	72796	S2:S4(5N)(TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE? OR BEHAVIOR? OR BEHAVIOUR? OR BEHAV???)
S29	238408	S2:S4(5N)(OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB? OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?)
S30	43143	S2:S4(5N)(ANALYS? OR ANALYT? OR ANALYZ?)
S31	6067	S14:S16(25N)S28:S30
S32	27	S31(25N)S18
S33	61	S31(25N)(S5 OR OS OR OPERATING()SYSTEM? ?)
S34	13	S31(25N)S5
S35	32	(S32 OR S34) NOT (S1 OR S23 OR S25 OR S27)
S36	24	S19(25N)KERNEL? ?
S37	21	S36 NOT (S1 OR S23 OR S25 OR S27)
S38	47	S35 OR S37
S39	29	S38 AND AC=US/PR AND AY=(1963:2003)/PR
S40	29	S38 AND AC=US AND AY=1963:2003
S41	29	S38 AND AC=US AND AY=(1963:2003)/PR
S42	26	S38 AND PY=1963:2003

S43   37   S39:S42

43/5,K/18   (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2007 WIPO/Thomson. All rts. reserv.

01137858   **Image available**
FLOW LABELS
ETIQUETTES DE FLUX
Patent Applicant/Assignee:
  NOKIA CORPORATION, Keilalahdentie 4, FIN-02150 Espoo, FI, FI (Residence),
    FI (Nationality)
Inventor(s):
  RAISANEN Vilho I, Gyldenintie 8 A 20, FIN-00200 Helsinki, FI,
Legal Representative:
  WILLIAMS David John (agent), Page White & Farrer, 54 Doughty Street,
    London WC1N 2LS, GB,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200459923 A2-A3 20040715 (WO 0459923)
  Application: WO 2003IB6410 20031224 (PCT/WO IB03006410)
  Priority Application: US 2002329750 20021227
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD
  SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
  (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE
  SI SK TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class (v7): H04L-012/56
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 7677

English Abstract
  There is disclosed a system for monitoring a packet data flow,
  comprising: a data flow source element including: determining means
  adapted to determine a quality of service identifier for the data flow;
  first generating means adapted to generate an encoded value in dependence
  on the quality of service identifier; allocating means adapted to
  allocate the quality of service identifier and the encoded value to the
  flow label for each data packet of the data flow; and transmitting means
  for forwarding data packets including flow labels to a routing domain;
  and a routing domain interface element including: receiving means for
  receiving data packets from the data flow source; second generating means
  adapted to generate a further encoded value in dependence on the quality
  of service identifier in a flow label of a data packet; comparing means
  adapted to compare the further encoded value to the encoded value in the
  flow label; and routing means adapted to selectively route the data
  packets in dependence on the comparing step.

French Abstract
  L'invention concerne un systeme de surveillance d'un paquet de flux de
  donnees, comprenant un element source de flux de donnees qui comporte des
  moyens de determination concus pour determiner une qualite
  d'identificateur de service du flux de donnees ; des premiers moyens de
  generation concus pour generer une valeur codee en fonction de la qualite
  de l'identificateur de service ; des moyens d'attribution concus pour

attribuer la qualite de l'identificateur de service et la valeur codee a
l'etiquette de flux pour chaque paquet de donnees du flux de donnees ; et
des moyens de transmission pour transmettre des paquets de donnees
comprenant des etiquettes de flux vers un domaine d'acheminement ; et un
element d'interface de domaine d'acheminement comportant des moyens de
reception afin de recevoir des paquets de donnees de la source de flux de
donnees ; des seconds moyens de generation concus pour generer une autre
valeur codee en fonction de la qualite de l'identificateur de service
dans une etiquette de flux d'un paquet de donnees ; des moyens de
comparaison concus pour comparer l'autre valeur codee avec la valeur
codee de l'etiquette de flux ; et des moyens d'acheminement concus pour
acheminer de maniere selective les paquets de donnees en fonction de
l'etape de comparaison.

Legal Status (Type, Date, Text)
Publication   20040715 A2 Without international search report and to be
                          republished upon receipt of that report.
Examination   20040910 Request for preliminary examination prior to end of
                          19th month from priority date
Search Rpt   20041111 Late publication of international search report
Republication 20041111 A3 With international search report.
Republication 20041111 A3 Before the expiration of the time limit for
                          amending the claims and to be republished in the
                          event of the receipt of amendments.

Fulltext Availability:
  Detailed Description
Detailed Description
... service' is
  prevented by generating at the QSE a an encoded value, preferably a
  cryptographic hash value, based in the preferred embodiment on the QoS

  identifier (i.e. the traffic aggregate identifier ,. such as a IDSCP)
  and the address of the data source (i.e. the address...

...label 400 in an embodiment of the present invention after allocation of
  a IDSCP and hash value. The label comprises a QoS identifier or
  traffic aggregate identifier 502, a hash value 504, and other data
  506, which could comprise a per-flow identifier, as discussed...

...for QoS level to be allocated to-a data flow.

  2. The QSE determines a QoS   identifier or traffic aggregate
  identifier ,
  such as a DSCP, for the flow corresponding to the QoS level request
  message, in step 502.

  3. The QSE generates a hash value based on the DSCP and the IP
  address of the server A, in step...
...IP address. For example, two flows from the same source could
  be allocated the same QoS   identifier or traffic aggregate
  identifier and
  therefore the same hash value, either simultaneously or sequentially,
  and thus unique identification of the flow may not be...

  43/5,K/35   (Item 21 from file: 349)
  DIALOG(R)File 349:PCT FULLTEXT
  (c) 2007 WIPO/Thomson. All rts. reserv.

  00463114   **Image available**
  METHOD AND SYSTEM FOR PROVIDING MULTIMEDIA SERVICE IN AN ATM COMMUNICATIONS
     NETWORK
  PROCEDE ET SYSTEME POUR FOURNIR DES SERVICES MULTIMEDIA DANS UN RESEAU DE

COMMUNICATIONS ATM
Patent Applicant/Assignee:
  THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK,
  LAZAR Aurel A,
  LIM Koon-Seng,
  CHAN Mun Choon,
  HUARD Jean-Francois,
Inventor(s):
  LAZAR Aurel A,
  LIM Koon-Seng,
  CHAN Mun Choon,
  HUARD Jean-Francois,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9853578 A1 19981126
  Application: WO 97US9363 19970523 (PCT/WO US9709363)
  Priority Application: WO 97US9363 19970523
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  CA JP US
Main International Patent Class (v7): H04L-012/66
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 4998

English Abstract
  A multimedia interface (G) for interfacing between a broadband network
  (R) and a service-and-applications network (B) is provided. The model (G)
  includes an organized collection of interfaces (121-125) designated as
  binding interface base (BIB). The interfaces include resource control
  (124) for routing, admission control and the like; the management
  services (125); connection management (122); and the information
  transport (121). The Kernel forms a distributed operating system for
  managing and controlling multimedia networking resources to provide
  services with quality of services (QOS) guarantees.

French Abstract
  Cette invention se rapporte a une interface multimedia (G) concue pour
  servir de lien entre un reseau a bande large (R) et un reseau de services
  et d'applications (B). Ce modele d'interface (G) contient une collection
  organisee d'interfaces (121-125) concues comme une base d'interfaces de
  liaison (BIB). Ces interfaces comportent des fonctions de commande de
  ressources (124) pour le routage, de commande d'admission et similaire;
  les services de gestion (125); la gestion des connexions (122) et le
  transport des informations (121). Le noyau forme un systeme
  d'exploitation reparti pour la gestion et la commande des ressources du
  reseau multimedia, afin de fournir des services avec des garanties de
  qualite de services (QOS).

Patent and Priority Information (Country, Number, Date):
  Patent: ... 19981126
Fulltext Availability:
  Detailed Description
Publication Year: 1998

Detailed Description
... that these APIs allow
  service specification and creation in a high-level
  programming language.
  The kernel forms a distributed operating system
  for managing and controlling multimedia networking
  resources to provide services with quality of service

(QOS) guarantees. The system includes an organized
collection of interfaces designated as binding interface
base (BIB), and an overlying set of processing
capabilities.

Brief Descriiption of the Drawing
Fig. 1 is schematic depiction of a broadband
 kernel in accordance with a preferred embodiment of the
invention.

Fig. 2 is a diagram of...

? t23/5,k

23/5,K/1   (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2007 WIPO/Thomson. All rts. reserv.

00826033   **Image available**
SYSTEM AND METHOD FOR RAPID COMPLETION OF DATA PROCESSING TASKS DISTRIBUTED
    ON A NETWORK
SYSTEME ET PROCEDE POUR REGULER L'ACHEMINEMENT DES DONNEES DANS UN RESEAU
Patent Applicant/Assignee:
    GOTO COM INC, 140 W. Union Street, Pasadena, CA 91103, US, US (Residence)
    , US (Nationality)
Inventor(s):
    CARRASCO John Joseph, 2841 St. George Street, Los Angeles, CA 90027, US,
    DOLIOV Stephan, 45 Crestline Drive #4, San Francisco, CA 94131, US,
    EHRENFRIED Frank B, 1150 Glenwood Drive, Millbrae, CA 94030, US,
Legal Representative:
    GNOFFO Vincent J (agent), Brinks Hofer Gilson & Lione, P.O. Box 10087,
        Chicago, IL 60610, US,
Patent and Priority Information (Country, Number, Date):
    Patent: WO 200159561 A1 20010816 (WO 0159561)
    Application: WO 2001US3801 20010206 (PCT/WO US0103801)
    Priority Application: US 2000502692 20000211
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
    AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
    ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
    LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
    TR TT TZ UA UG UZ VN YU ZA ZW
    (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
    (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
    (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
    (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class (v7): G06F-009/00
International Patent Class (v7): G06F-012/00
Publication Language: English
Filing Language: English
Fulltext Availability:
    Detailed Description
    Claims
Fulltext Word Count: 8897

English Abstract
    A method for running tasks on a network, comprising: creating (200) at
    least one sub-group of data from a universe of data; identifying (202)
    the sub-group of data with a header, the header containing executable
    code; sending (204) the sub-group of data to an available processor; and
    performing (206) tasks with the available processor to obtain result data
    using the sub-group of data and instructions contained in the executable
    code in the header.

French Abstract
    L'invention concerne un procede d'execution de taches dans un reseau, qui
    consiste a creer (200) au moins un sous-groupe de donnees a partir de
    donnees multiples; a identifier (202) le sous-groupe de donnees
    comportant une en-tete, laquelle contient un code executable; a
    transmettre (204) le sous-groupe de donnees a un processeur disponible;
    et a executer (206) des taches a l'aide du processeur disponible afin
    d'obtenir des donnees resultantes au moyen du sous-groupe de donnees et
    des instructions contenues dans le code executable place dans l'en-tete.

Legal Status (Type, Date, Text)
Publication 20010816 A1 With international search report.
Publication 20010816 A1 Before the expiration of the time limit for
                        amending the claims and to be republished in the
                        event of the receipt of amendments.
Examination   20011108 Request for preliminary examination prior to end of
                        19th month from priority date
Correction   20020207 Corrected version of Pamphlet: page 1, description,
                        replaced by a new page 1 (with an updated version of
                        the pamphlet front page); pages 1/5-5/5, drawings,
                        replaced by new pages 1/2-2/2; due to late
                        transmittal by the receiving Office
Republication 20020207 A1 With international search report.

Fulltext Availability:
  Detailed Description

Detailed Description
... representing a task queue. The values for these keys are hash tables
also. This nested hash table has three required keys and any number of
optional keys. The required keys are named 'event', 'columns', and
'delimiter'. The optional keys will be described later. The value for
the key   named ' event 'specifies a group of data from the input
file that contains the data elements of interest. The input data file
parser identifies the
  groupname . Forexample,thevalueforthekeynamed' event 'couldbe
'userClick'. Thekeynamedcolumnspointstoanotherhashtable. Thekeys
of this nested hash table are the arbitrarily assigned column names
that any
later data processing tasks may need...
?

? t25/5,k/3,6

25/5,K/3   (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2007 European Patent Office. All rts. reserv.

00684742
Method for the efficient updating of the hash value of a data file
Verfahren zum effizienten Aktualisieren des Hashwertes eines Dateien
Procede de mise a jour efficace de la valeur d'adressage d'un fichier de
     donnees
PATENT ASSIGNEE:
   Fischer, Addison M., (944372), 4073 Merchantile Avenue, Naples, Florida
     33942, (US), (Proprietor designated states: all)
INVENTOR:
   Fischer, Addison M., 4073 Merchantile Avenue, Naples, Florida 33942, (US)
LEGAL REPRESENTATIVE:
   KUHNEN & WACKER (101502), Patent- und Rechtsanwaltsburo Postfach 19 64,
     85319 Freising, (DE)
PATENT (CC, No, Kind, Date):   EP 654920   A2   950524 (Basic)
                               EP 654920   A3   000308
                               EP 654920   B1   030102
APPLICATION (CC, No, Date):   EP 94303430 940512;
PRIORITY (CC, No, Date): US 154520 931119
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;
   NL; PT; SE
INTERNATIONAL PATENT CLASS (V7): H04L-009/32
CITED PATENTS (EP B): EP 328232 A; EP 386867 A; WO 90/13084 A

ABSTRACT EP 654920 A2
     The disclosed methodology permits an insecure computing system to
safely perform high security electronic financial transactions. The
present invention permits the hash of a file to be taken on an
incremental basis. It permits any part of the file to be changed while
allowing a new aggregate hash to be computed based on the revised file
portion and the prior total hash. The aggregate hash is readily updatable
with each record revision without having to recompute the hash of the
entire file in accordance with conventional techniques. These objectives
using two functions. The first function is an effective one-way hash
function "H" for which it is computationally impossible to find two data
values that hash to the same result. The second function is a commutative
and associative function "F" (and inverse "Finv") and provides a
mechanism for combining the aggregate hash and the hash of updated
records. Examples of these latter functions include exclusive OR ("XOR"),
and arithmetic addition. The methodology involves combining the hash of
each file record and the hash of an identification of the record (i.e., a
record number or key). These hashes are combined using a function ("F")
whereby individual records may be extracted using the inverse of that
function (Finv). In this fashion, an individual record may be extracted
from the aggregate hash and updated. With each update, the file hash as
computed according to this invention is preferably also written after
being encrypted under a key known only to the valid user, or if it is
digitally signed by the valid user or if it is held in a tamper resistant
storage. Each record is represented by its identification hashed together
with its data content. All such record are added together to provide a
highly secure integrity check. This aggregate hash reflects the entire
database such that the tampering (or rearranging) of any data record is
revealed by the use of the record identifier (i.e., record number) in the
hash calculation due to its impact on the aggregate hash (e.g., the sum).
(see image in original document)
ABSTRACT WORD COUNT: 345
NOTE:
   Figure number on first page: 4

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Examination: 001011 A2 Date of request for examination: 20000814
  Search Report: 20000308 A3 Separate publication of the search report
  Change: 040519 B1 Legal representative(s) changed 20040402
  Lapse: 040121 B1 Date of lapse of European Patent in a
                                 contracting state (Country, date): AT
                                 20030102, DK 20030402, ES 20030730, GR
                                 20030102, NL 20030102, PT 20030402,
  Lapse: 040107 B1 Date of lapse of European Patent in a
                                 contracting state (Country, date): AT
                                 20030102, DK 20030402, GR 20030102, NL
                                 20030102, PT 20030402,
  Lapse: 031119 B1 Date of lapse of European Patent in a
                                 contracting state (Country, date): AT
                                 20030102, GR 20030102, NL 20030102, PT
                                 20030402,
  Lapse: 031022 B1 Date of lapse of European Patent in a
                                 contracting state (Country, date): NL
                                 20030102, PT 20030402,
  Grant: 030102 B1 Granted patent
  Examination: 010411 A2 Date of dispatch of the first examination
                                 report: 20010226
  Lapse: 031008 B1 Date of lapse of European Patent in a
                                 contracting state (Country, date): NL
                                 20030102,
  Lapse: 031112 B1 Date of lapse of European Patent in a
                                 contracting state (Country, date): GR
                                 20030102, NL 20030102, PT 20030402,
  Oppn: 031210 B1 Opposition 01/20031001 Opposition filed
                                 Giesecke & Devrient GmbH (65761)
                                 Prinzregentenstr. 159 81677 Munchen (DE)
  Change: 040114 B1 Legal representative(s) changed 20031125
  Lapse: 040303 B1 Date of lapse of European Patent in a
                                 contracting state (Country, date): AT
                                 20030102, BE 20030102, DK 20030402, ES
                                 20030730, GR 20030102, NL 20030102, PT
                                 20030402,
  Application: 950524 A2 Published application (A1with Search Report
                                 ;A2without Search Report)
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
        CLAIMS A   (English)   EPAB95   812
        CLAIMS B   (English)   200301   788
        CLAIMS B   (German)   200301   1467
        CLAIMS B   (French)   200301   948
        SPEC A   (English)   EPAB95   7014
        SPEC B   (English)   200301   11005
Total word count - document A   7827
Total word count - document B   14208
Total word count - documents A + B   22035
...CLAIMS data which are modified from time to time comprising the steps
     of:
        performing a predetermined hash operation on a first data
     group and indicia identifying said first group ;
        performing a predetermined hash operation on a second data
     group and indicia identifying said second group ; and
        combining the hashes to determine an aggregate hash using a
     function whereby said hash of said first group and said hash of
     said second group may be subsequently extracted from the aggregate
     hash using the inverse...

...comprising the steps of:

combining the informational content of a data record with a
record identifier to determine an aggregate data string;
performing a hashing operation on said aggregate data
string to determine a hash value; and
applying a function having both associative and commutative
properties to said hash value.
15. A method according to any one of claims 1, 9, 13 or 14...

...CLAIMS units are sectors.
9. A method according to claim 1, further including:
performing a predetermined hash operation on a first data group
and indicia identifying said first group ;
performing a predetermined hash operation on a second data group
and indicia identifying said second group ; and
combining the hashes to determine an aggregate hash using a function
whereby said hash of said first group and said hash of said
second group may be subsequently extracted from the aggregate hash
using the inverse...

...data unit by applying a function having both associative and commutative
properties to the aggregate hash and the updated data unit.
14. A method according to claim 1, further including:
combining the informational content of a data record with a record
identifier to determine an aggregate data string;
performing a hashing operation on said aggregate data string
to determine a hash value; and
applying a function having both associative and commutative properties
to said hash value.
15. A method according to any one of claims 1, 9, 13, or 14...

25/5,K/6   (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2007 WIPO/Thomson. All rts. reserv.

00794269   **Image available**
METHOD FOR TRANSFERRING A SOFTWARE MODULE FROM A SENDER TO A RECEIVER IN A
    COMPUTER SYSTEM OR NETWORK
PROCEDE DE TRANSFERT D'UN MODULE LOGICIEL DEPUIS UN ENVOYEUR A UN
    DESTINATAIRE DANS UN SYSTEME OU RESEAU INFORMATIQUE
Patent Applicant/Assignee:
  TRYLLIAN BV, Kruislaan 400, NL-1098 SM Amsterdam, NL, NL (Residence), NL
   (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
  BOLWIDT Erwin Joost, Madridplantsoen 141, NL-2034 VS Haarlem, NL, NL
    (Residence), NL (Nationality), (Designated only for: US)
Legal Representative:
  DE VRIES Johannes Hendrik Fokke (agent), De Vries & Metman B.V.,
    Overschiestraat 180, NL-1062 XK Amsterdam, NL,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200127757 A1 20010419 (WO 0127757)
  Application: WO 2000NL720 20001006 (PCT/WO NL0000720)
  Priority Application: NL 1013249 19991008
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
  ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
  LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
  TR TT TZ UA UG US UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM

English Abstract
  In a method for transferring a software module from a sender to a
  receiver in a computer system or network, wherein the software module
  comprises at least one object and at least one class, the object being an
  instance of the class(es), each class or group of classes is provided
  with a class identifier. Both the sender and receiver comprises a
  database of classes and groups of classes with corresponding class
  identifiers. The sender transmits the class identifier of a software
  module to be transferred to the receiver and the receiver checks its
  database for presence of the received class identifier. The receiver
  transmits a message "present" or "absent" to the sender and the sender
  transfers only the object of the software module or both the object and
  the class or group of classes depending on the presence or absence of the
  class or group of classes at the receiver.

French Abstract
  Dans un procede destine a transferer un module logiciel depuis un
  envoyeur a un destinataire au sein d'un systeme ou d'un reseau
  informatique, dans lequel le module logiciel comprend au moins un objet
  et au moins une classe, l'objet etant une instance de la classe, chaque
  classe ou groupe de classes est pourvu d'un identificateur de classe.
  L'envoyeur et le destinataire possedent tous deux une base de donnees des
  classes et des groupes de classes, ainsi que les identificateurs de
  classe correspondants. L'envoyeur transmet au destinataire un
  identificateur de classe d'un module logiciel destine a etre transfere et
  le destinataire verifie dans sa base de donnees la presence de
  l'identificateur recu. Le destinataire transmet alors a l'envoyeur le
  message <= present >= ou <= absent >=, et l'envoyeur ne transfere que
  l'objet du module logiciel, ou bien a la fois l'objet et la classe, ou
  groupe de classes, selon la presence ou l'absence de la classe, ou groupe
  de classes, au niveau du destinataire.

Detailed Description
... class or group of classes of a software module and
  the result of a cryptographic hash function, wherein said re
  sult is obtained by executing a cryptographic hash function on
  the data file of the class or group of classes. In this manner
  a secure identifier is obtained, wherein errors due to identi
  cal identifiers for different classes or groups of classes are
  excluded.
  According to a preferred embodiment, the receiver
  checks a class or group of classes received from a sender by
  comparing the result of the hash function of the received class
  identifier with the result obtained by carrying out the same
  cryptographic hash function on the data file of the class or
  group of classes received.

In this manner security in transferring software mod
ules is guaranteed as receivers will refuse to use classes
where the hash function result of the identifier does not match
with the hash function result obtained by...at the receiver side. At the
sender side a program is executed determining a cryptographic
 hash function of the data file of the group of classes and the
result of this hash function is stored. This hash function result is
the second part of the unique class identifier .

It is noted that any cryptographic hash function can
be used which provides a result which is significantly shorter
than the original...

Claim
... class or group of classes received from a
sender by comparing the result of the hash function of the re
ceived class identifier with the result obtained by carrying
out the same cryptographic hash function on the data file of
the class or group of classes received.

8 Method according to claim 7, wherein the receiver
transmits a message...
?

File 347:JAPIO Dec 1976-2006/Nov(Updated 070228)
        (c) 2007 JPO & JAPIO
File 350:Derwent WPIX 1963-2006/UD=200715
        (c) 2007 The Thomson Corporation

Patents abstracts

Set	Items	Description
S1	0	AGGID? ?
S2	2653756	AGGREGAT? OR GROUP???? OR BATCH???? L???? OR BUNCH???? OR CLUSTER???? OR A
S3	154542	CATALOG? OR CATEGOR??? OR CLASSIFY? SIFICATION? OR FAMILY? OR FAMILIES OR TAXONOM?
S4	148190	ORGANIZ??? OR ORGANIZAT? OR ORGANIS??? OR ORGANISAT? OR CLUSTER????
S5	10436	KERNEL? ?
S6	206437	(TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE? OR BEHAVIOR? OR BEHAVIOUR? OR BEHAV??? OR EVENT? ?)(5N)(DATUM OR DATA OR INFORMATION)
S7	307692	(OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB? OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?)(5N)(DATUM OR DATA OR INFORMATION)
S8	91429	(ANALYS? OR ANALYT? OR ANALYZ? OR BIST OR SELFTEST? OR SELFDIAGNOS? OR DEBUG? OR DE()BUGG??? OR FAIL?)(5N)(DATUM OR DATA OR INFORMATION)
S9	46343	(ABEND? ? OR FAULT? OR DEFECT? OR ANOMAL? OR DEFICIEN? OR ABNORMA? OR FLAW? OR IMPAIR? OR ABERRA?)(5N)(DATUM OR DATA OR INFORMATION)
S10	74498	(MALFUNCTION? OR INOPERA? OR DYSFUNCT? OR DISFUNCT? OR BUG? ? OR ERROR? ? OR DEVIA? OR IRREGULAR?)(5N)(DATUM OR DATA OR - INFORMATION)
S11	5233	(CORRUPT? OR DEGRAD?)(5N)(DATUM OR DATA OR INFORMATION)
S12	10850	S2:S4(5N)(ABEND? ? OR FAULT? OR DEFECT? OR ANOMAL? OR DEFICIEN? OR ABNORMA? OR FLAW? OR IMPAIR? OR ABERRA?)
S13	10154	S2:S4(5N)(MALFUNCTION? OR INOPERA? OR DYSFUNCT? OR DISFUNCT? OR BUG? ? OR ERROR? ? OR DEVIA? OR IRREGULAR?)
S14	1974	S2:S4(5N)(CORRUPT? OR DEGRAD?)
S15	18337	S2:S4(3N)(ID OR IDS OR IDENTIFIER? ? OR TAG? ?. OR LABEL???? OR INDICANT? ? OR INDICAT?R? ? OR DESIGNAT?)
S16	3971	S2:S4(3N)(METATAG? OR METAVALUE? OR INDICIA? ? OR NAME? ?)
S17	644537	KEY? ? OR CODE OR CODES
S18	18122	HASH? OR MESSAGE()DIGEST? OR MESSAGEDIGEST? OR DIGEST? ?
S19	76	S2:S4(5N)(BUG OR BUGS OR BUGGY? ?)
S20	12242	S2:S4(5N)S6:S8
S21	885	S15:S16 AND (S19:S20 OR S12:S14)
S22	230	S2:S4(5N)S5
S23	3	S15:S16 AND S22
S24	1093	(S22 OR S19:S20 OR S12:S14)(10N)S17
S25	48	(S21 OR S23) AND S24
S26	6	S25 AND AC=US/PR AND AY=(1963:2003)/PR
S27	17	S25 AND AC=US AND AY=1963:2003
S28	17	S25 AND AC=US AND AY=(1963:2003)/PR
S29	38	S25 AND PY=1963:2003
S30	41	S26:S29
S31	4	S18 AND (S21 OR S23)
S32	3	S31 NOT S25
S33	5	S5 AND (S21 OR S23)
S34	5	S33 NOT (S25 OR S32)

Set	Items	Description
S1	0	AGGID? ?
S2	2653756	AGGREGAT? OR GROUP???? OR BATCH???? OR BUNDL???? OR ASSEMB-L???? OR BUNCH???? OR CLUSTER???? OR AGGROUP?
S3	154542	CATALOG? OR CATEGOR??? OR CLASSIFY? OR CLASSIFIE?? OR CLAS-SIFICATION? OR FAMILY? OR FAMILIES OR TAXONOM?
S4	148190	ORGANIZ??? OR ORGANIZAT? OR ORGANIS??? OR ORGANISAT? OR CL-USTER????
S5	10436	KERNEL? ?
S6	191716	(TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE? OR BEHA-VIOR? OR BEHAVIOUR? OR BEHAV???)(5N)(DATUM OR DATA OR INFORMA-TION)
S7	307692	(OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB? OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?)(5N)(DATUM OR DATA OR INFOR-MATION)
S8	74187	(ANALYS? OR ANALYT? OR ANALYZ?)(5N)(DATUM OR DATA OR INFOR-MATION)
S9	10850	S2:S4(5N)(ABEND? ? OR FAULT? OR DEFECT? OR ANOMAL? OR DEFI-CIEN? OR ABNORMA? OR FLAW? OR IMPAIR? OR ABERRA?)
S10	10154	S2:S4(5N)(MALFUNCTION? OR INOPERA? OR DYSFUNCT? OR DISFUNC-T? OR BUG? ? OR ERROR? ? OR DEVIA? OR IRREGULAR?)
S11	5362	S2:S4(5N)(CORRUPT? OR DEGRAD? OR EVENT? ? OR BIST OR SELFT-EST? OR SELFDIAGNOS? OR DEBUG? OR BUGGY OR BUG OR BUGS)
S12	11456	S2:S4(5N)S6:S8
S13	230	S2:S4(5N)S5
S14	18337	S2:S4(3N)(ID OR IDS OR IDENTIFIER? ? OR TAG? ? OR LABEL???? OR INDICANT? ? OR INDICAT?R? ? OR DESIGNAT?)
S15	22671	(S2:S4 OR CLASS??)(3N)(ID OR IDS OR IDENTIFIER? ? OR TAG? ? OR LABEL???? OR INDICANT? ? OR INDICAT?R? ? OR DESIGNAT?)
S16	4734	(S2:S4 OR CLASS??)(3N)(METATAG? OR METAVALUE? OR INDICIA? ? OR NAME? ?)
S17	644537	KEY? ? OR CODE OR CODES
S18	18122	HASH? OR MESSAGE()DIGEST? OR MESSAGEDIGEST? OR DIGEST? ?
S19	1002	S14:S16 AND S9:S13
S20	1338	S14:S16(10N)S17
S21	66	S19 AND S20
S22	1	S21 AND S18
S23	5	S19 AND S18
S24	1	S21 AND (S5 OR OS OR OPERATING()SYSTEM? ?)
S25	41420	S2:S4(5N)(TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE? OR BEHAVIOR? OR BEHAVIOUR? OR BEHAV???)
S26	144464	S2:S4(5N)(OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB? OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?)
S27	11567	S2:S4(5N)(ANALYS? OR ANALYT? OR ANALYZ?)
S28	2889	S14:S16 AND S25:S27
S29	28	S28 AND S18
S30	41	S28 AND (S5 OR OS OR OPERATING()SYSTEM? ?)
S31	6	S19 AND S5
S32	65	S29:S31 NOT S22:S24
S33	35	S32 AND AC=US/PR AND AY=(1963:2003)/PR
S34	46	S32 AND AC=US AND AY=1963:2003
S35	46	S32 AND AC=US AND AY=(1963:2003)/PR
S36	51	S32 AND PY=1963:2003
S37	56	S33:S36

? t32/69,k/3

0007604382 - Drawing available
WPI ACC NO: 1996-221594/199622
XRPX Acc No: N1996-186030
Relational database grouping · hash operation for executing SQL group-by
and aggregation queries - reading database table row, hashing group
identifier to generate index into table, determining if matching group
table entry exits for group identifier , aggregating fields into
corresp. group data fields and updating housekeeping data
Patent Assignee: TANDEM COMPUTERS INC (TAND)
Inventor: SHARMA A; ZELLER H
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 5511190	A	19960423	US 1995376026	A	19950120	199622	B

Priority Applications (no., kind, date): US 1995376026 A 19950120

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 5511190	A	EN	22	8	

Alerting Abstract US A

The structured query language (SQL) grouping and aggregation system
incorporates hash -based techniques, several overflow handling strategies
and statistics-based process-selection criteria. SQL group-by queries are
executed on distributed database tables or tables stored locally to the
database management system (DBMS) processor executing the grouping method.

Hash -based techniques allow groupings and aggregates to be generated on
the fly through the use of partial aggregates maintained in primary memory.
Where primary memory is limited, groups and aggregates are still generated
for as many groups as can be maintained in primary memory, while various
overflow procedures are provided for buffering ungrouped data and writing
that data to an overflow disk file for later processing. In one overflow
procedure, raw data from groups that cannot be aggregated in primary memory
are buffered then written to the overflow disk file.

In a second overflow procedure, ungroupable raw data is formatted the
same as data being aggregated in the group table, buffered, and then
written to the overflow file. In a third overflow procedure, ungroupable
raw data is partially aggregated in an output buffer maintained in primary
memory before being written to the overflow file maintained in secondary
memory. Database table statistics maintained by a cataloguer are consulted
to determine whether hash -based grouping or conventional sort based
grouping should be used to execute a group-by query. The system is
adaptable to running a grouping query against a partitioned database on
distributed processors.

ADVANTAGE - Allows groupings and aggregates to be stored on-the-fly
through use of partial aggregates in primary memory.

Title Terms/Index Terms/Additional Words: RELATED; DATABASE; GROUP; HASH ;
   OPERATE; EXECUTE; SQL; AGGREGATE; QUERY; READ; TABLE; ROW; IDENTIFY;
   GENERATE; INDEX; DETERMINE; MATCH; ENTER; EXIT; FIELD; CORRESPOND; DATA;
   UPDATE; HOUSEHOLD

Class Codes
International Classification (Main): G06F-017/30

File Segment: EPI;
DWPI Class: T01

Relational database grouping hash operation for executing SQL group-by and aggregation queries...

...reading database table row, hashing group identifier to generate index into table, determining if matching group table entry exits for group identifier , aggregating fields into corresp. group data fields and updating housekeeping data

Original Titles:
Hash -based database grouping system and method

Alerting Abstract ...The structured query language (SQL) grouping and aggregation system incorporates hash -based techniques, several overflow handling strategies and statistics-based process-selection criteria. SQL group-by...

... Hash -based techniques allow groupings and aggregates to be generated on the fly through the use...

...in secondary memory. Database table statistics maintained by a cataloguer are consulted to determine whether hash -based grouping or conventional sort based grouping should be used to execute a group-by

Title Terms.../Index Terms/Additional Words: HASH ;

Original Publication Data by Authority

Original Abstracts:
...query language (SQL) grouping and aggregation system and method that incorporates hash-based techniques, several overflow handling strategies and statistics-based process-selection criteria. The method can execute SQL group-by...

...to the database management system (DBMS) processor executing the grouping method. Hash-based techniques allow groupings and aggregates to be generated on the fly through the use of partial aggregates maintained...

...table statistics maintained by a cataloger are consulted to determine whether hash-based grouping or conventional sort based grouping should be used to execute a group-by query. The system is...
Claims:
A method for performing a hash grouping operation on a relational database table, said table comprising rows and columns, said columns including at...

...group column and zero or more data fields to said zero or more data columns; (2) applying a hash function to said group identifier to generate a hashed group value , said hashed group value serving as an index into a memory-resident hash table, said hash table mapping hashed group values into corresponding memory-resident group table entries, each group table entry including group data fields...

...store for a single group aggregated raw data from said data fields, a group identifier and housekeeping data; (3) determining from contents of said hash table whether a matching group table entry exists for a group defined by said group identifier; (4) when said matching group table entry exists, aggregating contents of said data fields into corresponding group...

...an additional group table entry, writing into said additional group table entry said group identifier and said data fields, and initializing said housekeeping data. (6) when said matching group table

0013659561 - Drawing available
WPI ACC NO: 2003-755771/ 200371
XRPX Acc No: N2003-605588
 Defect classification /inspection system for semiconductor wafers, has
database preparing unit that regroups defects having similar
characteristics and executing unit that classifies object defects
Patent Assignee: SONY MAGNESCALE KK (SONY); SONY PRECISION TECHNOLOGY INC
   (SONY); KONDO H (KOND-I); OKUYAMA M (OKUY-I); SAITO Y (SAIT-I); SONY
   MFG SYSTEMS CORP (SONY)
Inventor: KONDO H; OKUYAMA M; OKUYAMA S; SAITO H; SAITO Y
Patent Family (7 patents, 5 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20030152276	A1	20030814	US 2002222431	A	20020816	200371	B
DE 10240877	A1	20030821	DE 10240877	A	20020904	200371	E
JP 2003233801	A	20030822	JP 200232910	A	20020208	200371	E
KR 2003067457	A	20030814	KR 200250747	A	20020827	200382	E
TW 565689	A	20031211	TW 2002118288	A	20020814	200434	E
US 7171039	B2	20070130	US 2002222431	A	20020816	200710	E
KR 615738	B1	20060825	KR 200250747	A	20020827	200714	E

Priority Applications (no., kind, date): JP 200232910 A 20020208; US
   2002222431 A 20020816

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20030152276	A1	EN	12	5	
JP 2003233801	A	JA	10		
TW 565689	A	ZH			
KR 615738	B1	KO			Previously issued patent KR 2003067457

   Alerting Abstract US A1
   NOVELTY - The system (100) has a unit (50) that extracts a
characteristics quantity of an image of a defect part and another
extracting unit (60) digitizes the quantity. A database preparing unit (70)
regroups defects having similar characteristics by a defect
classification unit on the basis of the digitized characteristics
information. An executing unit (80) classifies the defects of the
object with reference to the database.
   USE - Used for classifying and inspecting defects of semiconductor
wafers.
   ADVANTAGE - By reducing the operator's participation in the data base
preparation, a database containing defect   groups can be reduced with
the similarity in defect characteristics that can be easily constructed.
The defects are classified on a set of hierarchical levels, thereby
increase the accuracy and eliminate the classification   errors .
   DESCRIPTION OF DRAWINGS - The drawing shows a block diagram representing
the structure of a defect   classification or inspection system.
   20 Image pickup unit
   50 Defect extracting unit
   60 Characteristics extracting unit
   70 Database preparing unit
   80 Classification executing unit
   100 Defect   classification /inspection system

Title Terms/Index Terms/Additional Words: DEFECT; CLASSIFY; INSPECT; SYSTEM
 ; SEMICONDUCTOR; WAFER; DATABASE; PREPARATION; UNIT; SIMILAR;
 CHARACTERISTIC; EXECUTE; OBJECT

Class Codes
International Classification (Main): G01N-021/00, H01L-021/66
International Classification (+ Attributes)
IPC + Level Value Position Status Version

IPC +	Level	Value	Position	Status	Version
G01N-0021/956	A	I	F	R	20060101
G06F-0017/30	A	I	L	R	20060101
G06T-0001/00	A	I	L	R	20060101
G06T-0007/00	A	I		R	20060101
H01L-0021/66	A	I	F	B	20060101
G01N-0021/88	C	I	F	R	20060101
G06F-0017/30	C	I	L	R	20060101
G06T-0001/00	C	I	L	R	20060101
G06T-0007/00	C	I		R	20060101
H01L-0021/66	C	I	F	B	20060101

File Segment: EPI;
DWPI Class: S01; T01; U11
Manual Codes (EPI/S-X): S01-G02B1; T01-E01A; T01-G02A1; T01-J05B4F;
  U11-F01B3

 Defect   classification /inspection system for semiconductor wafers, has
database preparing unit that regroups defects having similar
characteristics and executing unit that classifies object defects

Original Titles:
... DEFECT   CLASSIFYING /INSPECTING DEVICE...
... Defect   classification /inspection system...

... Defect   classification /inspection system

  Alerting Abstract ...digitizes the quantity. A·database preparing unit
(70) regroups defects having similar characteristics by a defect
classification unit on the basis of the digitized characteristics
information. An executing unit (80) classifies the defects of the
object with reference to the database.USE - Used for classifying and
inspecting defects of semiconductor wafers...

...ADVANTAGE - By reducing the operator's participation in the data base
preparation, a database containing defect groups can be reduced with
the similarity in defect characteristics that can be easily constructed.
The defects are classified on a set of hierarchical levels, thereby
increase the accuracy and eliminate the classification   errors .
   ...

...DESCRIPTION OF DRAWINGS - The drawing shows a block diagram representing
the structure of a defect classification or inspection system...

...100 Defect   classification /inspection system

Original Publication Data by Authority

Original Abstracts:
...a characteristics extracting unit. A database preparing unit regroups
defects having similar characteristics by a defect classification unit
on the basis of the characteristics information digitized by the
characteristics extracting unit with respect to defects belonging to a
defect group selected and designated by an operator via a display/input
unit, and prepares on a database memory a database in which the defects of
the inspection object are hierarchically classified. A classification
executing unit hierarchically classifies the defects of the inspection
object with reference to the database provided by the database preparing
unit...

...unit from the image of the defect part of the inspection object
extracted by the defect extracting unit. Thus, a defect classification
/inspection system having high classification accuracy is provided...

...a characteristics extracting unit. A database preparing unit regroups
defects having similar characteristics by a defect classification unit
on the basis of the characteristics information digitized by the
characteristics extracting unit with respect to defects belonging to a
defect group selected and designated by an operator via a display/input
unit, and prepares on a database memory a database in which the defects of
the inspection object are hierarchically classified. A classification
executing unit hierarchically classifies the defects of the inspection
object with reference to the database provided by the database preparing
unit...

...unit from the image of the defect part of the inspection object
extracted by the defect extracting unit. Thus, a defect classification
/inspection system having high classification accuracy is provided.
Claims:
...What is claimed is:1. A defect classification /inspection
system comprising:a defect extracting unit for picking up an image of an
inspection object and comparing the image...

...of the defect part extracted by the defect extracting unit;a database
preparing unit including defect classifying means for grouping
defects having similar characteristics on the basis of the characteristics
information digitized by the characteristics extracting unit,
classification code providing means for providing a classification
code to the defects grouped by the defect classifying means,
storage means for saving the characteristics information of the defects
grouped by the defect classifying means together with the
classification code provided by the classification code providing
means as a database, and selecting/designating means for selecting and
designating a defect group for which a database of a next hierarchical
level is to be prepared, from the respective defect groups having the
grouped defects and having the classification code provided thereto,
the database preparing unit regrouping defects having similar
characteristics by the defect classifying means on the basis of the
characteristics information digitized by the characteristics extracting
means with respect to the defects belonging to the defect group
selected and designated by the selecting/designating means, and preparing
a database in which the defects of the inspection object are hierarchically
classified; anda classification executing unit for hierarchically
classifying the defects of the inspection object with reference to the
database provided by the database preparing unit...

...What is claimed is:1. A defect classification /inspection system
comprising: a defect extracting unit for picking up an image of an
inspection object and comparing the image...
...of the defect part extracted by the defect extracting unit;a database
preparing unit including defect classifying means for grouping
defects having similar characteristics on the basis of the characteristics
information digitized by the characteristics extracting unit,
classification code providing means for providing a classification
code to the defects grouped by the defect classifying means,
storage means for saving the characteristics information of the defects
grouped by the defect classifying means together with the
classification code provided by the classification code providing
means as a database, and selecting/designating means for selecting and
designating groups having mixed defects for which a database of a next
hierarchical level is to be prepared, from the respective defect groups
having the grouped defects and having the classification code
provided thereto, the database preparing unit regrouping defects having
similar characteristics by the defect classifying means on the basis of

```
G06K-0009/00   A  I  F  B   20060101
H01L-0021/66   A  I  L  R   20060101
G06K-0009/62   A  I  L  B   20060101
G01N-0021/88   C  I  F  R   20060101
H01L-0021/66   C  I  L  R   20060101
```

File Segment: EPI;
DWPI Class: S03; U11
Manual Codes (EPI/S-X): S03-E04F2; U11-F01A2; U11-F01B3; U11-F01B4

Defective wafer image classification method for semiconductor device manufacture, involves arranging defect images as array depending on characteristic of image of designated category and displays them on screen

Original Titles:
... Defect image classifying method and apparatus and a semiconductor device manufacturing process based on the method and apparatus...
... Defect image classifying method and apparatus and a semiconductor device manufacturing process based on the method and apparatus

Alerting Abstract ...NOVELTY - Several defect images are arranged as array depending on characteristics of the image of designated category and displayed on a screen.USE - Classification of defective wafer image obtained using microscope for semiconductor device production...

...DESCRIPTION OF DRAWINGS - The figure shows the display screen showing classified arrangement of defect image. (Drawing includes non-English language text).

Original Publication Data by Authority

Original Abstracts:
...for classifying and displaying images are provided. In an embodiment of the present invention a defect image classification method using inspected objects is provided. The method includes defect images obtained from at least one inspected object. Next a set of defect images is classified into a specified category , which has a feature. The defect images are arranged for display according to the feature and then displayed. The arranging of...

...also be based on an evaluation value for each defect image. Another embodiment provides a defect image classification method using inspected objects. Defect images are obtained from at least one inspected object. Next the defect images are classified into a plurality of categories and at least two information items for example, a defect...

...of defects in the inspected object, information associated with a category of the plurality of categories , and a defect size distribution, are displayed...

...for classifying and displaying images are provided. In an embodiment of the present invention a defect image classification method using inspected objects is provided. The method includes defect images obtained from at least one inspected object. Next a set of defect images is classified into a specified category , which has a feature. The defect images are arranged for display according to the feature and then displayed. ...also be based on an evaluation value for each defect image. Another embodiment provides a defect image classification method using inspected objects. Defect images are obtained from at least one inspected object. Next the defect images are classified into a plurality of categories and at least two information items for example, a defect...

...of defects in the inspected object, information associated with a
category of the plurality of categories , and a defect size
distribution, are displayed.
Claims:
What is claimed is:1. A defect image classification system for
classifying defect images, produced from at least one object of
inspection by imaging, into a plurality of...

...means to calculate features of the defect images;categorization means to
specify a set of defect images to match a specified category ;evaluation
means to calculate evaluation values of the defect images using the
features of the...

...What is claimed is:1. A computer memory storing code for a defect
image classification method using inspected objects, said computer memory
comprising: code for obtaining defect images from at least one inspected
object;code for extracting features from...

...code for displaying a plurality of second defect images on the screen,
wherein the second defect images belong to one of classified defect
categories ; and code for Basic Derwent Week: 200226
? t30/69,k/29

 30/69,K/29   (Item 17 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.

0009378353 - Drawing available
WPI ACC NO: 1999-313047/ 199926
Related WPI Acc No: 1999-326768
XRPX Acc No: N1999-233824
Analyzing semiconductor production data
Patent Assignee: KLA TENCOR CORP (KLAT-N)
Inventor: HARDIKAR M; KULKARNI A; SHIFLETT R; ZHOU S
Patent Family (6 patents, 20 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 1999022310	A1	19990506	WO 1998US22735	A	19981027	199926	B
EP 1025512	A1	20000809	EP 1998956236	A	19981027	200039	E
			WO 1998US22735	A	19981027		
US 6097887	A	20000801	US 1997958780	A	19971027	200039	E
US 6233719	B1	20010515	US 1997958288	A	19971027	200129	E
JP 2001521249	W	20011106	WO 1998US22735	A	19981027	200203	E
			JP 2000518336	A	19981027		
US 6775819	B1	20040810	US 1997958780	A	19971027	200453	E
			US 1999394388	A	19990910		

Priority Applications (no., kind, date): US 1999394388 A 19990910; US
   1997958780 A 19971027; US 1997958288 A 19971027

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1999022310	A1	EN	39	8	

National Designated States,Original: JP
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE
   IT LU MC NL PT SE

| EP 1025512 | A1 | EN | | | PCT Application WO 1998US22735 |
| | | | | | Based on OPI patent   WO 1999022310 |

Regional Designated States,Original: DE FR GB

JP 2001521249	W	JA	48		PCT Application WO 1998US22735
					Based on OPI patent WO 1999022310
US 6775819	B1	EN			Continuation of application US

   1997958780

                              Continuation of patent US 6097887

33/7/8   (Item 8 from file: 2)

04557299   INSPEC Abstract Number: B90010480, C90014708
 Title: High-speed event counting and classification using a dictionary hash technique
 Author(s): McKenney, P.E.
 Author Affiliation: Div. of Inf. Sci. & Technol., SRI Int., Menlo Park, CA, USA
 Conference Title: Proceedings of the 1989 International Conference on Parallel Processing (Cat. No.89CH2701-1)   p.71-5 vol.3
 Editor(s): McAuliffe, K.P.; Kogge, P.M.
 Publisher: Pennsylvania State Univ. Press, University Park, PA, USA
 Publication Date: 1989 Country of Publication: USA   3 vol. (xv+137+xiii+263+xiii+262) pp.
 ISBN: 0 271 00686 2
 Conference Sponsor: Penn State Univ
 Conference Date: 8-12 Aug. 1989   Conference Location: St. Charles, IL, USA
 Language: English   Document Type: Conference Paper (PA)
 Treatment: Practical (P)
 Abstract: A 'dictionary hash' technique is discussed. When presented with a large group of labelled events , this technique can stochastically determine the number of unique labels quickly and with a small amount of memory. It is applicable to areas such as signal processing, process monitoring and control, and computer communications network monitoring and control. The author focuses on application of this technique to congestion-avoidance algorithms in high-speed computer communications packet networks. In this application, the events are packet arrivals at a particular network node and the labels consist of the source and destination addresses in the packets. The set of all packets with a particular source/destination address pair constitutes a 'session'; the more sophisticated congestion-avoidance algorithms require knowledge of the number of active sessions. This knowledge can be provided in an effective and timely manner by the dictionary hash technique presented. The technique is configurable to any desired degree of accuracy and lends itself to a simple realization in high-speed parallel hardware. (11 Refs)
 Subfile: B C

 33/7/38   (Item 2 from file: 144)

 12510509   PASCAL No.: 96-0181994
 Organization of a file system using class name expressions based on a B-tree
 HIRADE M; TANAKA E
 Graduate School of Engineering, Kobe University, Kobe, 657, Japan
 Journal: Systems and computers in Japan, 1996, 27 (1) 1-11
 ISSN: 0882-1666 CODEN: SCJAEP Availability: INIST-15508; 354000053193230010
 No. of Refs.: 13 ref.
 Document Type: P (Serial); V (Translation) ; A (Analytic)
 Country of Publication: United States
 Note: Trad. de : Denshi Joho Tsushin Gakkai Ronbunshi, JP, 1994, J77-D-I, 12, 794-802
 Language: English
 In the search of data from a database using a key, it is desirable that, even if the input key or the key in the database is in error, and there is no exactly matched key, still the system lists similar keys or retrieve the closest key. This paper discusses the organization and manipulation of the file, where the keys similar to the input key are listed, or the closest

key is retrieved. The basic idea is to combine the high efficiency of the B-tree for the retrieve/insert/delete of the key , and the ability of the hierarchical file based on the class name expression for the similar key search. By such an elaboration, it is possible to realize the search of similar keys, which cannot be executed by the B-tree, or insert/delete of the key, which is not considered in the hierarchical file based on the class name expression. An experiment is made by splitting the characters into two classes, i.e., a to m and n to z, and using 16,561 English words of length 6 to 10. The number of read-outs from the secondary memory in the retrieve/ insert/delete of the key is approximately 3, and the number of write-ins into the secondary memory in insert/delete is approximately 1. The search for the similar keys requires approximately 7.3 to 8.5 times larger read-ins compared to the search of the exact key. The retrieval rate is approximately 95 to 99 percent for a single error (substitution/insertion/missing). The efficiency of the use of the memory is approximately 70 percent.

09322543   INSPEC Abstract Number: C2005-04-7480-264
 Title: Dynamic instrumentation of production systems
   Author(s): Cantrill, B.M. ; Shapiro, M.W.; Leventhal, A.H.
   Conference Title: Proceedings of the General Track 2004 USENIX Annual
Technical Conference   p.15-28
   Publisher: USENIX Assoc, Berkeley, CA, USA
   Publication Date: 2004 Country of Publication: USA   295 pp.
   ISBN: 1 931971 21 8   Material Identity Number: XX-2004-00477
   Conference Title: Proceedings of the General Track 2004 USENIX Annual
Technical Conference
   Conference Date: 27 June-2 July 2004   Conference Location: Boston, MA,
USA
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Practical (P)

   Abstract: This paper presents DTrace, a new facility for dynamic
instrumentation of production systems. DTrace features the ability to
dynamically instrument both user-level and kernel -level software in a
unified and absolutely safe fashion. When not explicitly enabled, DTrace
has zero probe effect - the system operates exactly as if DTrace were not
present at all. DTrace allows for many tens of thousands of instrumentation
points, with even the smallest of systems offering on the order of 30,000
such points in the kernel alone. We have developed a C-like high-level
control language to describe the predicates and actions at a given point of
instrumentation. The language features user-defined variables, including
thread-local variables and associative arrays. To eliminate the need for
most postprocessing, the facility features a scalable mechanism for
 aggregating   data and a mechanism for speculative tracing . DTrace has
been integrated into the Solaris operating system and has been used to find
serious systemic performance problems on production systems - problems that
could not be found using preexisting facilities. (17 Refs)
   Subfile: C

06907174   INSPEC Abstract Number: C9806-6150N-036
 Title: ThreadMon: a tool for monitoring multithreaded program performance
   Author(s): Cantrill, B.M. ; Doeppner, T.W., Jr.
   Author Affiliation: SunSoft Inc., Mountain View, CA, USA
   Conference Title: Proceedings of the Thirtieth Hawaii International
Conference on System Sciences (Cat. No.97TB100234)   Part vol.1   p.
253-65 vol.1
   Editor(s): El-Rewini, H.; Patt, Y.N.
   Publisher: IEEE Comput. Soc. Press, Los Alamitos, CA, USA
   Publication Date: 1997 Country of Publication: USA   6 vol.
(xvii+766+xv+716+620+xiv+546+xiii+720+ix+275) pp.
   ISBN: 0 8186 7743 0   Material Identity Number: XX98-00841
   U.S. Copyright Clearance Center Code: 1060-3425/97/$10.00
   Conference Title: Proceedings of the Thirtieth Hawaii International
Conference on System Sciences
   Conference Sponsor: Univ. Hawaii Coll. Bus. Adm
   Conference Date: 7-10 Jan. 1997   Conference Location: Wailea, HI, USA
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Practical (P)

   Abstract: This paper describes ThreadMon, a monitoring tool for improving
the performance of multithreaded programs, and how we have used it to

examine various aspects of the many-to-many (or two-level) threads
implementation model. We run unmodified binary subject code , insert
software probes to collect data , and analyze and present the results in
real time on another machine. We show that the behavior of multithreaded
programs, particularly those running on multiprocessors, often defies
intuition when the many-to-many threads implementation model is used. (13
Refs)

   37/7/3   (Item 1 from file: 56)

HIDDEN in Plain Sight

Cantrill, Bryan
SUN MICROSYSTEM

ABSTRACT:
   In December 1997, Sun Microsystems had just announced its new flagship
machine: a 64-processor symmetric multiprocessor supporting up to 64
gigabytes' of memory and thousands of I/O devices. As with any new machine
launch, Sun was working feverishly on benchmarks to prove the machine's
performance. While the benchmarks were generally impressive, there was one
in particularan especially complicated benchmark involving several
machinesthat was exhibiting unexpectedly low performance. The benchmark
machinea fully racked-out behemoth with the maximum configuration of 64
processorswould occasionally become mysteriously distracted: Benchmark
activity would practically cease, but the operating system kernel
remained furiously busy. After some number of minutes spent on unknown
work, the operating system would suddenly right itself: Benchmark activity
would resume at full throttle and run to completion. Those running the
benchmark could see that the machine was on course to break the world
record, but these minutes-long periods of unknown kernel activity were
enough to be the difference between first and worst.
?

File 696:DIALOG Telecom. Newsletters 1995-2007/Mar 05
        (c) 2007 Dialog
File   9:Business & Industry(R) Jul/1994-2007/Mar 02
        (c) 2007 The Gale Group
File 15:ABI/Inform(R) 1971-2007/Mar 05
        (c) 2007 ProQuest Info&Learning
File 98:General Sci Abs 1984-2007/Mar
        (c) 2007 The HW Wilson Co.
File 484:Periodical Abs Plustext 1986-2007/Feb W3
        (c) 2007 ProQuest
File 813:PR Newswire 1987-1999/Apr 30
        (c) 1999 PR Newswire Association Inc
File 613:PR Newswire 1999-2007/Mar 05
        (c) 2007 PR Newswire Association Inc
File 635:Business Dateline(R) 1985-2007/Mar 03
        (c) 2007 ProQuest Info&Learning
File 810:Business Wire 1986-1999/Feb 28
        (c) 1999 Business Wire
File 610:Business Wire 1999-2007/Mar 05
        (c) 2007 Business Wire.
File 369:New Scientist 1994-2007/Nov W2
        (c) 2007 Reed Business Information Ltd.
File 370:Science 1996-1999/Jul W3
        (c) 1999 AAAS
File 16:Gale Group PROMT(R) 1990-2007/Mar 02
        (c) 2007 The Gale Group
File 47:Gale Group Magazine DB(TM) 1959-2007/Feb 22
        (c) 2007 The Gale group
File 148:Gale Group Trade & Industry DB 1976-2007/Feb 22
        (c)2007 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
        (c) 1999 The Gale Group
File 275:Gale Group Computer DB(TM) 1983-2007/Mar 02
        (c) 2007 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2007/Feb 22
        (c) 2007 The Gale Group
File 624:McGraw-Hill Publications 1985-2007/Mar 05
        (c) 2007 McGraw-Hill Co. Inc
File 634:San Jose Mercury Jun 1985-2007/Mar 02
        (c) 2007 San Jose Mercury News
File 649:Gale Group Newswire ASAP(TM) 2007/Feb 07
        (c) 2007 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2007/Mar 02
        (c) 2007 The Gale Group
File 647:CMP Computer Fulltext 1988-2007/May W3
        (c) 2007 CMP Media, LLC
File 674:Computer News Fulltext 1989-2006/Sep W1
        (c) 2006 IDG Communications

NPL

full-Text

Set	Items	Description
S1	1	AGGID? ?
S2	18339809	AGGREGAT? OR GROUP???? OR BATCH???? OR BUNDL???? OR ASSEMB-L???? OR BUNCH???? OR CLUSTER???? OR AGGROUP?
S3	9832532	CATALOG? OR CATEGOR??? OR CLASSIFY? OR CLASSIFIE?? OR CLAS-SIFICATION? OR FAMILY? OR FAMILIES OR TAXONOM?
S4	9963321	ORGANIZ??? OR ORGANIZAT? OR ORGANIS??? OR ORGANISAT? OR CL-USTER????
S5	92838	KERNEL? ?
S6	727710	(TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE? OR BEHA-VIOR? OR BEHAVIOUR? OR BEHAV???)(5N)(DATUM OR DATA OR INFORMA-TION)
S7	1923361	(OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB? OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?)(5N)(DATUM OR DATA OR INFOR-

```
                MATION)
S8    1237771   (ANALYS? OR ANALYT? OR ANALYZ?)(5N)(DATUM OR DATA OR INFOR-
                MATION)
S9      67798   S2:S4(5N)(ABEND? ? OR FAULT? OR DEFECT? OR ANOMAL? OR DEFI-
                CIEN? OR ABNORMA? OR FLAW? OR IMPAIR? OR ABERRA?)
S10     57521   S2:S4(5N)(MALFUNCTION? OR INOPERA? OR DYSFUNCT? OR DISFUNC-
                T? OR BUG? ? OR ERROR? ? OR DEVIA? OR IRREGULAR?)
S11    305466   S2:S4(5N)(CORRUPT? OR DEGRAD? OR EVENT? ? OR BIST OR SELFT-
                EST? OR SELFDIAGNOS? OR DEBUG? OR BUGGY OR BUG OR BUGS)
S12    204524   S2:S4(5N)S6:S8
S13      2605   S2:S4(5N)S5
S14    135394   S2:S4(3N)(ID OR IDS OR IDENTIFIER? ? OR TAG? ? OR LABEL????
                OR INDICANT? ? OR INDICAT?R? ? OR DESIGNAT?)
S15    151229   (S2:S4 OR CLASS??)(3N)(ID OR IDS OR IDENTIFIER? ? OR TAG? ?
                OR LABEL???? OR INDICANT? ? OR INDICAT?R? ? OR DESIGNAT?)
S16    286704   (S2:S4 OR CLASS??)(3N)(METATAG? OR METAVALUE? OR INDICIA? ?
                OR NAME? ?)
S17   9313994   KEY? ? OR CODE OR CODES
S18    473259   HASH? OR MESSAGE()DIGEST? OR MESSAGEDIGEST? OR DIGEST? ?
S19      4478   S14:S16(S)S9:S13
S20     11291   S14:S16(10N)S17
S21       219   S19(S)S20
S22         0   S21(S)S18
S23        29   S21 AND (S5 OR OS OR OPERATING()SYSTEM? ?)
S24         1   S21 AND S18
S25        80   S19 AND S18
S26    725652   S2:S4(5N)(TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE?
                OR BEHAVIOR? OR BEHAVIOUR? OR BEHAV???)
S27   1408837   S2:S4(5N)(OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB?
                OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?)
S28    620348   S2:S4(5N)(ANALYS? OR ANALYT? OR ANALYZ?)
S29     22008   S14:S16(S)S26:S28
S30        19   S29(S)S18
S31        12   S29(S)S5
S32        22   S19(S)S5
S33       151   (S23:S25 OR S30:S32) NOT S1
S34        40   S33/2004:2007
S35       111   S33 NOT S34
S36        76   RD  (unique items)
S37         0   AU=CANTRILL B?
S38         1   AU=CANTRILL, B?
? t38/3,k
```

38/3,K/1   (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2007 ProQuest Info&Learning. All rts. reserv.

03044494 996570761
Hidden in plain sight
 Cantrill, Bryan
ACM Queue v4n1 PP: 26 Feb 2006
ISSN: 1542-7730 JRNL CODE: ACMQ

File 347:JAPIO Dec 1976-2006/Nov(Updated 070228)
        (c) 2007 JPO & JAPIO
File 348:EUROPEAN PATENTS 1978-2007/ 200708
        (c) 2007 European Patent Office
File 349:PCT FULLTEXT 1979-2007/UB=20070301UT=200:   *Applicants*
        (c) 2007 WIPO/Thomson
File 350:Derwent WPIX 1963-2006/UD=200715
        (c) 2007 The Thomson Corporation

```
Set      Items    Description
S1           6    AU='CANTRILL B':AU='CANTRILL BRYA'
S2      225914    AGGREGAT?
S3       29125    KERNEL?
S4           3    S1 AND S2:S3
```

  4/6/1   (Item 1 from file: 348)
01613119
Method and apparatus for monitoring the performance of a computer system
Verfahren und Vorrichtung zur Leistungsuberwachung eines Rechnersystems
Methode et dispositif de surveillance de la performance d'un systeme
    d'ordinateur
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
    CLAIMS A (English)   200331   1352
    SPEC A   (English)   200331   4811
Total word count - document A   6163
Total word count - document B   0
Total word count - documents A + B   6163
? t4/ti/2-3

  4/TI/2   (Item 1 from file: 350)
DIALOG(R)File 350:(c) 2007 The Thomson Corporation. All rts. reserv.

Device driver enabling method, involves exchanging information between
clock system and cyclic system of operating system kernel , and exchanging
information indirectly between cyclic system and processor

Original Titles:
Method and apparatus for arbitrary resolution interval timeouts

  4/TI/3   (Item 2 from file: 350)
DIALOG(R)File 350:(c) 2007 The Thomson Corporation. All rts. reserv.

Dynamically allocated memory leak section identification method in computer
system, involves identifying call-site associated with leak section of
memory in response to received operating system failure information

Original Titles:
Method and apparatus for post-mortem kernel memory leak detection

STIC STIC Search Results
Feedback Form

Questions about the scope or the results of the search? Contact *the EIC searcher or contact*:

Alyson Dill, EIC 2100 Team Leader
272-3527, RND 4B28

Voluntary Results Feedback Form

➢ *I am an examiner in Workgroup:* [ ]   *Example: 2133*

➢ *Relevant prior art **found**, search results used as follows:*

- [ ] 102 rejection
- [ ] 103 rejection
- [ ] Cited as being of interest.
- [ ] Helped examiner better understand the invention.
- [ ] Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- [ ] Foreign Patent(s)
- [ ] Non-Patent Literature
   (Journal articles, conference proceedings, new product announcements etc.)

➢ *Relevant prior art **not found**:*

- [ ] Results verified the lack of relevant prior art (helped determine patentability).
- [ ] Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC2100 RND, 4B28

sira
Search and Information
Resources Administration